



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/562,100	04/26/2006	Mauro Pedretti	27793-00106USPX	8080
61060	7590	11/24/2010	EXAMINER	
WINSTEAD PC P.O. BOX 50784 DALLAS, TX 75201			A, PHI DIEU TRAN	
			ART UNIT	PAPER NUMBER
			3633	
			MAIL DATE	DELIVERY MODE
			11/24/2010	PAPER

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

<b>Office Action Summary</b>	<b>Application No.</b> 10/562,100	<b>Applicant(s)</b> PEDRETTI ET AL.	
	<b>Examiner</b> PHI D. A	<b>Art Unit</b> 3633	

**-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --**

### Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☒ Responsive to communication(s) filed on 23 June 2010.
- 2a) ☒ This action is **FINAL**.                      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-17 is/are pending in the application.
- 4a) Of the above claim(s) 3,4,8-10,14 and 15 is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-2, 5-7, 11-13, 16-17 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- |   |   |
|---|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)                    | 4) <input type="checkbox"/> Interview Summary (PTO-413)           |
| 2) <input type="checkbox"/> Notice of Draftperson's Patent Drawing Review (PTO-948) | Paper No(s)/Mail Date. _____                                      |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO/SB/08)         | 5) <input type="checkbox"/> Notice of Informal Patent Application |
| Paper No(s)/Mail Date _____   | 6) <input type="checkbox"/> Other: _____                          |

***Claim Rejections - 35 USC § 102***

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

2. Claims 1-2, 5-6, 16-17 are rejected under 35 U.S.C. 102(b) as being anticipated by Japan (7-173898).

Jap(7-173898, figures 2-3) shows a pneumatic support, comprising: a gas-tight, elongated hollow body (11) of a flexible material adapted to be pressurized with compressed gas; at least two compression elements (11c, figure 3) which, responsive to application of a transverse operations load, is axially compressed; at least one tension which, responsive to application of the transverse operational load, is axially tensioned, wherein the hollow body has a tapered shape toward both of its ends of the hollow body, wherein the at least one compression and tension element are connected to one another at a common node located at respective ends of the hollow body, wherein when the hollow body is inflated, the at least one compression element and the at least one tension member lie on a generator line of the hollow body, and relative to the application of the transverse operational load, the at least one compression element lies on a near side of the hollow body and the at least one tension element lies on a far side of the hollow body, the at least one tension element and the at least one compression element arranged around the hollow body in a rotationally symmetrical fashion, wherein the hollow body comprises an essentially circular cross section along a longitudinal axis, wherein the hollow body is divided into a plurality of chambers that can be pressurized transverse to the longitudinal axis, wherein

Art Unit: 3633

the plurality of chambers extend over the entire cross-section of the hollow body (figure 2), wherein the pneumatic support can be utilized as support elements in building construction and civil engineering works, wherein the pneumatic support is utilized as bridge supports, wherein a roadway construction is placed on an upper side of the at least one compression element and fixed thereon (inherently capable of functioning as claimed).

***Claim Rejections - 35 USC § 103***

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

4. Claim 7 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jap (7-173898).

Jap(.898) shows all the claimed limitations except for the plurality of chambers are pressurized to different degrees and subjected to a higher pressure toward the ends of the hollow body than towards a center of the hollow body.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Jap's disclosure to show the plurality of chambers are pressurized to different degrees and subjected to a higher pressure toward the ends of the hollow body than towards a center of the hollow body as it would have been an obvious matter of engineering design choice to choose to pressurize different chambers with selected pressure in order to provide different required stiffness and strength for different sections of the support.

Art Unit: 3633

5. Claim 11 is rejected under 35 U.S.C. 103(a) as being unpatentable over Jap (7-173898) in view of Lewis (3830519).

Jap(.898) shows all the claimed limitations except for the at least one compression and the at least one tension element are fixed on the hollow body via at least one of either a plurality of bands that extend around the hollow body and are fixed on the at least one tension element and the at least one compression element pockets, wherein the at least one tension element and the at least one compression element are inserted into said pockets; and welt-type connections.

Lewis shows at least one tension element and at least one compression element (22) are fixed on the hollow body via a plurality of bands that extend around the hollow body and are fixed on the at least one tension and compression element.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Jap's disclosure to show the at least one compression and the at least one tension element are fixed on the hollow body via at least one of either a plurality of bands that extend around the hollow body and are fixed on the at least one tension element and the at least one compression element pockets, wherein the at least one tension element and the at least one compression element are inserted into said pockets; and welt-type connections as it would allow for the easy attachment of the load bearing elements to the support as taught by Lewis.

6. Claims 12-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over Jap (7-173898) in view of Lewis (3830519) as applied to claim 11 above and further in view of Isaac (3300910).

Art Unit: 3633

Jap(.898) as modified shows all the claimed limitations except for the hollow body is composed of at least one inner bladder inserted therein; the inner bladder is of an air-tight elastic membrane.

Isaac shows a pneumatic support having an outer cover (8), and inner bladder inserted therein; the inner bladder (16) is of an air-tight elastic membrane.

It would have been obvious to one having ordinary skill in the art at the time of the invention to modify Jap's modified disclosure to show the hollow body is composed of at least one inner bladder inserted therein; the inner bladder is of an air-tight elastic membrane as taught by Isaac in order to provide a durable and puncture resistance structure.

### ***Response to Arguments***

7. Applicant's arguments filed 6/18/2010, and 9/10/2010 have been fully considered but they are not persuasive.

Applicant states that the reference to Japan (7-173898) does not show the limitation of “at least one compression element which, responsive to application of a transverse operational load, is axially compressed”, since the wire is incapable of supporting a compression load”, examiner respectfully disagrees. First of all, the claim requires that the compression element is responsive to the transverse operational load, and the wire structure is responsive to the load. Secondly, the claim limitations do not set forth any specific operational load/force that a structure is required to support. Thirdly, the wire of the reference certainly is “responsive to application of a transverse operation, is axially compressed” as claimed. The reference's structure shows the claimed limitations and able to function as claimed. The rejections are thus proper.

***Conclusion***

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Phi D A whose telephone number is 571-272-6864. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Brian Glessner can be reached on 571-272-6754. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Art Unit: 3633

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

/Phi D A/  
Primary Examiner, Art Unit 3633

Phi Dieu Tran A

23/11/1011/20/2010